

it to point of use was begun in November, 1900, and such rapid progress has been made that it is now completed to and beyond the new Olaa road.

The supplying of the necessities of life to the people employed by the Olaa Sugar Company, Limited, as likewise others residing in the Puna district who are engaged in the profitable industry of cultivating sugar cane, has called forth the necessity of establishing by the company of two large stores, one being at nine miles and one at seventeen miles on the lands of the company, which embrace 21,000 acres.

At nine miles the company has recently moved into a large 2-story establishment in which is kept one of the largest and most complete stocks of general merchandise to be found in any plantation company's store on the island of Hawaii. The building is 30x60 in dimensions, two stories in height, while its general features and size are practically the same as the company store at 17-mile station.

The primary object of the Olaa Sugar Company, Limited, in establishing its own stores was for the purpose of meeting the immediate wants of its employees and furnishing them with supplies at cost, plus freight and store expenses. In addition to the store at that place there have been established at 9-miles three large warehouses in which are stored immense quantities of supplies to be drawn upon direct when ordered in bulk, and thus keep the shelf stock, or retail department, well supplied. Of these three warehouses one will be used exclusively for the purpose of storing large quantities of fertilizer for plantation use. A feature of the main store at 9-miles is the fact that the cars of the Hilo Railroad system pass directly in front of the building, so that all goods can be unloaded from the cars directly upon the wide platform surrounding the store, which is a decided advantage.

The new box flume has been completed to the new Olaa road, a distance of ten miles, from which point a branch flume is under construction to the mill, and it is fully expected that it will be completed as soon as the new mill is ready.

Between 8,000,000 and 9,000,000 gallons of water will be required at the mill in twenty-four hours, and after the water has performed its duty of fluming the cane it will be picked up, run into a cistern and pumped into the stand pipe and utilized at the mill.

Owing to the climatic conditions and natural advantages of Olaa, the question of labor has been generally satisfactory and attractive to laborers. For this reason there has been very little shortage of labor since the plantation was started.

Following are the officers of the Olaa Sugar Company, Limited:

L. A. Thurston, President.  
B. F. Dillingham, Vice President.  
A. W. Van Valkenburg, Secretary.  
E. E. Paxton, Treasurer.  
E. A. Mott-Smith, Treasurer.  
F. B. McStocker, General Manager.

## Puna Sugar Company.

The property of the Puna Sugar Company is situated some twenty-four miles from Hilo and is reached over the Hilo Railroad system. The property comprises 10,000 acres of land, held in fee simple and leasehold, and lies in what is known as the Puna district. Of the above area about 6000 acres are considered to be good land and well adapted for the successful growth of sugar cane. At the present time 650 acres have been planted to Lahaina cane, which for its age looks well. The first cane planted on this plantation was in January, 1900, which was cut for seed, and in conjunction with other seed was used for planting the present crop of cane.



YELLOW CALEDONIA CANE ON PLANTATION OF HILO SUGAR COMPANY, HILO, HAWAII

The company expects to take off its first crop about January 1, 1902, which will be ground in the Olaa mill under contract. The company is now placing 1000 acres in condition for planting, and it is highly probable that a mill will be erected the coming year. At the present time the company is employing some 250 men, in addition to which there are several large contracting gangs.

The entire area of cane that will be planted lies below the 900-foot level, while an analysis made of the soil shows fully 3 per cent of lime.

The average cost of clearing land at Puna is given at \$40 per acre, which is remarkably low when the general character of the country is taken into consideration. Cane that was cut last August and September for seed is rattoning nicely, and taken as a whole the prospects for the future of the plantation are exceedingly bright.

As rapidly as the conditions will permit the land is being cleared for the planting of cane.

It would be rather difficult without glancing over the maps of the property, drawn to a scale of 2000 feet to the inch, to form an intelligent idea of the vast holdings of the company, the property having a frontage along the line of the Hilo Railroad for a distance of eight miles.

All the preliminary work of mill and plantation railroad construction has been laid out, and active work of constructing a

railroad system will be inaugurated the latter part of the year to connect the districts of Kapoho, Pahoa and Kamaili with the mill when constructed.

For the past eight years the average rainfall at Puna has been from 75 to 80 inches, and was very evenly distributed, usually falling at night. During the daytime the weather is warm, and the prevailing winds are usually light.

The headquarters of the company on the plantation are located at the present depot of the railroad company. A regular post-office system has been established at Puna, besides a general store and such lines of trade as are necessary to supply the wants of the local community.

The affairs of the company are carefully looked after by W. H. C. Campbell, as general manager, who has had years of experience in the cultivation of sugar cane, having had charge of several large plantation properties on Maui, and been manager of Hamoa plantation, from which property the largest crop ever taken off was harvested under his regime.

Following is the list of officers of the company:

M. P. Robinson, President.  
B. F. Dillingham, Vice President.  
A. J. Campbell, Secretary.  
E. E. Paxton, Treasurer.  
L. A. Thurston, Auditor.  
B. F. Dillingham Co., Honolulu Agents.

## Waiakea Mill Company.

Situated one mile from Hilo in a southerly direction are the vast fields of sugar cane and mill of the Waiakea Mill Company, which controls 95,000 acres of land, 5000 of which are now in cane, the product from same being converted into sugar at the mill of the company, which has a capacity of seventy tons in twenty-four hours. It is a 9-roller mill and fitted with every appliance for the successful reduction of the product of the plantation.

During the year 1900 the company cleared 700 acres of land, but this year, owing to the scarcity of labor, will not be able to clear any additional land and make it ready for planting. The cane as it comes to the mill in cars of large capacity looks well and will average right through about four and one-half tons of sugar to the acre the year around.

As is the case elsewhere in the Hilo district of Hawaii, no irrigation is required, as the rainfall is quite sufficient. Some thirty miles of railroad is maintained upon the plantation, and some 700 men find steady employment in the fields of cane and about the main works.

During an interview with C. C. Kennedy, the manager of the plantation, and likewise one of the owners, it was ascertained that the question of labor is one of great moment to the planters, and that at the present time the plantations throughout the entire islands could easily employ 20,000 additional laborers in clearing land, planting cane, etc.

As showing the life of the soil in the above district it may be stated that the first sugar cane was planted twenty-two years ago, which was the time that Mr. Kennedy came to Hilo to erect the Waiakea mill and also to manage the property. He has made a careful study of the subject of cane culture in all its branches, and in his daily operations displays a practical knowledge of the subject in hand.

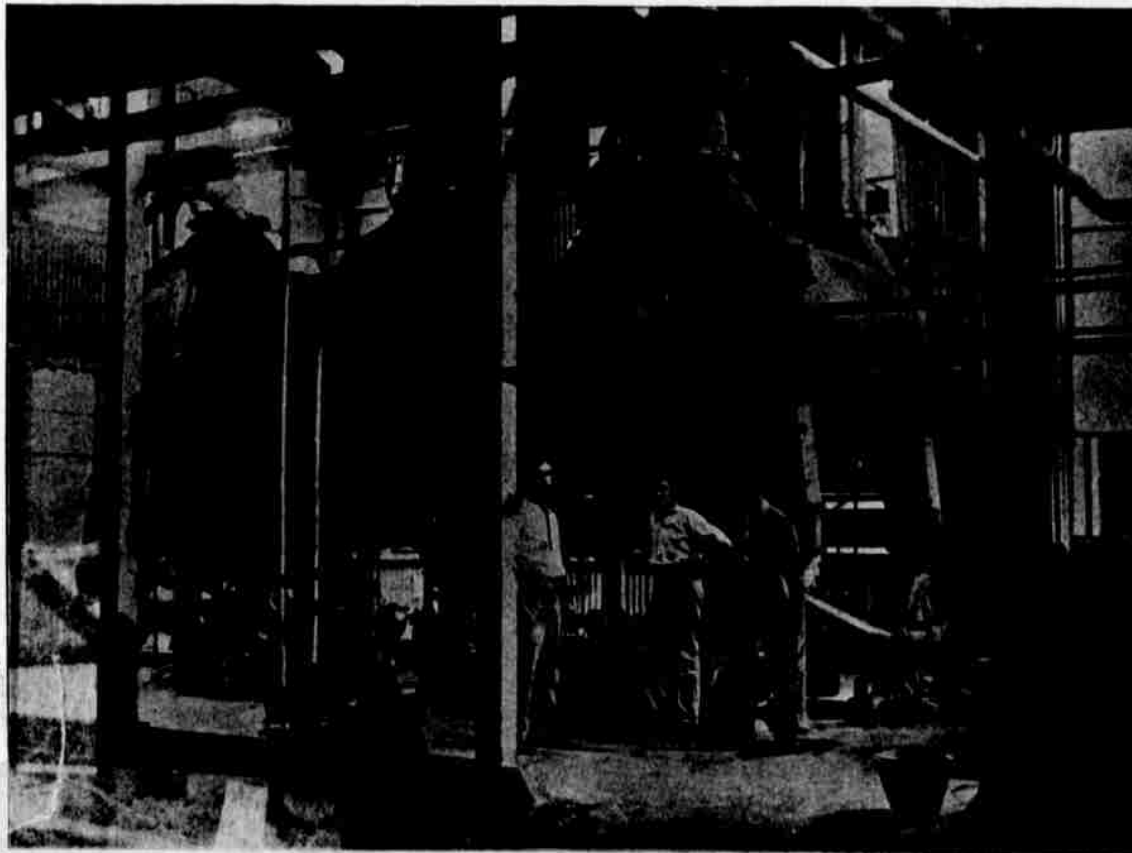
The company has a large warehouse capable of holding 1600 tons, in which the sugar is temporarily stored, it being shipped every week direct from Hilo to the Mainland.

Theo. H. Davies & Co. of Honolulu are the local agents for the plantation, while the house of Williams, Dimond & Co. in San Francisco performs that service for the company on that end.

## Hilo Sugar Company.

About one mile from the center of Hilo is the plantation of the Hilo Sugar Company, which has an area of some 4000 acres in sugar cane, besides much other territory planted by independent planters, the product from which lands is converted into raw sugar in the mill of the above company. Last year these independent planters received for their crop about \$120,000.

The land now owned by the above company was formerly occupied by three plantations, known respectively as the Kaiwiki, Wainaku and Thomas Spencer plantations, and in 1884 they were purchased and amalgamated by J. D. Spreckels and W. G. Irwin, since which period the plantation has gone under its present name. Up to the present time the entire area under cultivation has been planted with the Lahaina variety of cane, but the company through its manager, John A. Scott, is now introducing other varieties of cane, such as the Rose Bamboo and Yellow Caledonia. A short time ago an area of forty-five acres



LILLIE TRIPLE EFFECT, WAIAKEA MILL, HAWAII